

Aug. 1, 2016

Natural Gas Trends

Highlights

Futures fly high following bullish build

Natural gas futures rocketed Thursday morning following a historically low build to gas in storage.

US gas in storage increased by 17 Bcf to 3.294 Tcf in the week ended July 22, the US Energy Information Administration reported Thursday.

The NYMEX September gas futures contract soared 19 cents to \$2.85/MMBtu within an hour of the storage announcement. It represents the highest gain to the front-month since July 1 when the contract spiked 20 cents to \$20.91.

The net injection was less than any analysts expected, as those surveyed by Platts predicted a build ranging anywhere from 24 Bcf to 34 Bcf.

The injection was 37 Bcf less than both the build reported in the corresponding week last year and the five-year average. In fact, it was the lowest build ever reported in a week ended in July, according to EIA data, which begins in 2010. Prior to today, the smallest injection for a week ending in July was 26 Bcf, which was announced for the week ended July 23, 2010.

And that is not the only record broken by the EIA's storage report. Thursday's report also featured the largest July withdrawal (13 Bcf) from the South Central region's salt-dome facilities and the first net withdrawal (4 Bcf) ever during July from the region's non-salt facilities. The previous record for the largest salt-dome withdrawal was 9 Bcf.

Higher-than-normal temperatures last week led to more demand for gas-fired power generation. Week-over-week, temperatures on a US population-weighted basis averaged 1.3 degrees Fahrenheit higher than the previous week's average, at 78.9 degrees, 1.2 degrees more than normal, according to Platts Analytics' Bentek Energy. Power burn estimates for the week averaged 1.7 Bcf/d higher than the previous week's average, peaking at 41.1 Bcf on Thursday, July 21, the highest value ever estimated before that date.

The injection marks the 12th consecutive build that was substantially less than both the five-year average and last year in the corresponding week. This trend has cut significantly to the storage overhang at the start of injection season.

Stocks are not 436 Bcf, or 15.3%, higher than the year-ago level of 2.858 Tcf, and 524 Bcf, or 18.95, more than the five-year average of 2.770 Tcf. At the start of the storage season in late March, stocks were 1,017 Bcf more than the corresponding week last year and 874 Bcf above the five-year average, a decline of 581 Bcf and 350 Bcf, respectively.

And early estimates indicate the next net injection will be even smaller. Platts Analytics' early forecast expects a 5-Bcf build for the week ending July 29.

Source: Platts Gas Daily

Data

- Sept. 2016 Natural Gas Futures Contract (as of July 29) NYMEX at Henry Hub closed at \$2.876 per million British thermal units (MMBtu)
- Sept. 2016 Light, Sweet Crude Oil Futures Contract WTI (as of July 29), closed at \$41.60 per U.S. oil barrel (Bbl.) or approximately \$7.17 per MMBtu

Last week: Texas warmer than normal last week

For the week beginning 7/24/16 and ending 7/30/16, cooling degree days (CDDs) were higher than normal (warmer) on average for the week and for the year to date for most of the Texas cities shown.

Source: www.cpc.ncep.noaa.gov

| COOLING DEGREE DAYS (CDD) | | | | |
|---------------------------|-----------------------------------|-----------------------------|------------------------|-------------------------|
| City or Region | Total CDD for week ending 7/30/16 | *Week CDD + / - from normal | Year-to-date total CDD | * YTD % +/- from normal |
| Amarillo | 107 | 16 | 1011 | 28% |
| Austin | 140 | 0 | 1672 | 2% |
| DFW | 167 | 20 | 1674 | 17% |
| El Paso | 159 | 38 | 1717 | 25% |
| Houston | 143 | 10 | 1770 | 10% |
| SAT | 137 | -3 | 1811 | 7% |
| Texas** | 139 | 9 | 1652 | 11% |
| U.S.** | 99 | 24 | 822 | 20% |

* A minus (-) value is cooler than normal; a plus (+) value is warmer than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which HDDs are calculated. ** State and U.S. degree days are population-weighted by NOAA.

-999 = Normal Less Than 100 or Ratio Incalculable

Last week: U.S. natural gas storage at 3,294 Bcf

For the week ending 7/22/2016 working gas in storage increased from 3,277 Bcf to 3,294 Bcf. This represents an increase of 17 Bcf from the previous week. Stocks were 436 Bcf higher than last year at this time and 524 Bcf above the 5 year average of 2,770 Bcf.

Source: <http://ir.eia.gov/ngs/ngs.html>

| U.S. WORKING GAS IN STORAGE | | | | |
|-----------------------------|---------------------|------------|-----------------|---------------------------------|
| Region | Week ending 7/22/16 | Prior week | One-week change | Current Δ from 5-YR Average (%) |
| East | 715 | 697 | 19 | 10.0% |
| Midwest | 815 | 801 | 14 | 20.2% |
| Mountain | 213 | 210 | 3 | 31.5% |
| Pacific | 318 | 318 | 0 | 0.6% |
| South Central | 1,233 | 1,251 | -18 | 27.8% |
| Lower 48 Total | 3,294 | 3,277 | 17 | 18.9% |

Lower 48 states, underground storage, units in billion cubic feet (Bcf)

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Last week: U.S. gas rig count down for the week

The gas rig count for the U.S. was down two for the week and down 123 when compared to twelve months ago. The total rig count for the U.S. was up one compared to last week and down 411 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

Source: Baker Hughes

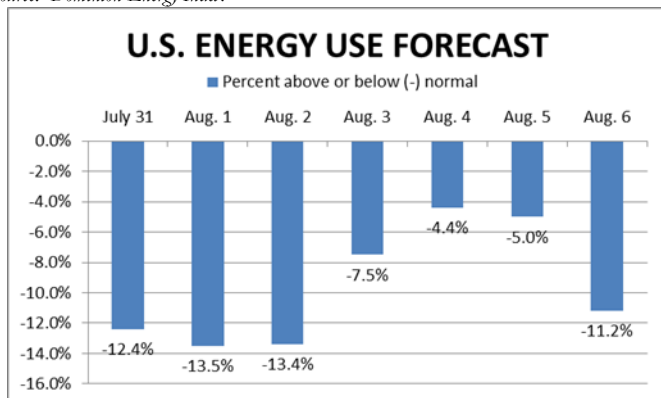
BAKER HUGHES ROTARY RIG COUNT

| | As of 7/29/2016 | +/- prior week | Year ago | +/- year ago |
|------------|--------------------|-------------------|----------|-----------------|
| Texas | 214 | 39 | 375 | -161 |
| U.S. gas | 86 | -2 | 209 | -123 |
| U.S. oil | 374 | 3 | 664 | -290 |
| U.S. total | 463 | 1 | 874 | -411 |
| Canada | 119 | 17 | 215 | -96 |

This week: U.S. energy use below normal

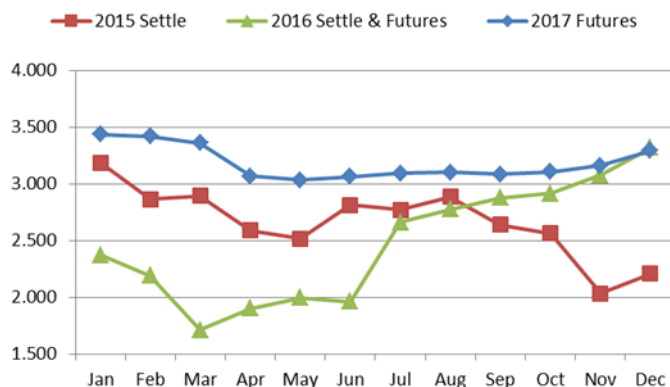
U.S. energy use is predicted to be below normal this week, according to the Dominion Energy Index, as shown below. Dominion forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index

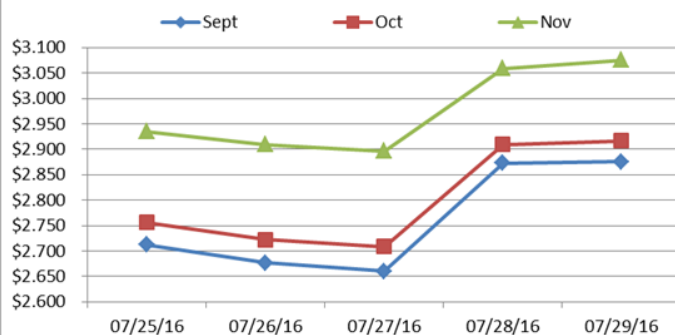


2016 prices. Natural gas prices for 2016, shown below in green, are the NYMEX settlement prices for Jan-July and futures prices for the year.

NYMEX NATURAL GAS PRICES: 2014 - 2016



LAST WEEK: NYMEX HENRY HUB FUTURES PRICES



NATURAL GAS PRICE SUMMARY AS OF 7/29/2016

| | This Week | +/- Last Week | +/- Last Year | 12-Month Strip Avg. |
|----------------------|-----------|------------------|------------------|------------------------|
| US September futures | | | | |
| NYMEX | \$2.876 | \$0.099 | -\$0.852 | \$3.121 |